

REMARKS

Claims 1-15 are currently pending in this application. Applicants have withdrawn claims 16-20 from consideration without prejudice in response to a restriction requirement. Reconsideration is respectfully requested in light of the above amendments and the following remarks.

The Examiner rejected objected to claim 7 for including a typographical error. Applicants have amended claim 7 in accordance with the Examiner's suggestions and respectfully requests that this objection be withdrawn.

The Examiner maintained the rejection of claims 1-3, 5, 6, 8 and 10-15 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 7,058,443 to Struble. Applicants respectfully traverse this rejection.

Applicants' claimed invention as recited in independent claims 1 and 12 is directed to an implantable cardiac stimulation device that provides therapeutic electrical stimulation to the heart of a patient. For example, independent claim 1 recites a device comprised in part by a processor operative to evaluate frequencies of left and right atrial signals and, if one of the left and right signals has a higher frequency, the processor determines the atrium with the higher frequency to be a source of atrial flutter.

(Underlining added for emphasis only). Applicants respectfully submit that Alt does not disclose or suggest the recited claim elements.

The Examiner points to column 15, lines 49-51 to allege that Struble teaches that the frequency of an sVT can be determined through the collection of timing data and that Struble therefore discloses utilizing the frequency of an arrhythmia to identify the originating chamber of the arrhythmia. Applicants disagree.

Rather, the system of Struble determines the origin of various atrial arrhythmias as a function of the percentage of events first sensed in the right or left chambers. For instance, in the example illustrated in FIGS. 12A and 12B, the percentage of atrial flutter/atrial fibrillation AFL/AF events first sensed in the right atrium is 40% and the percentage first sensed in the left atrium is 60% such that the atrial arrhythmias are predominately being initiated in the left atrium. (Struble, col. 15, lines 56-67).

Thus, when the system of Struble detects an arrhythmia it then determines in which chamber the arrhythmia was first detected. That data is then recorded over time to determine in which chamber the arrhythmias are predominately being initiated in to identify the origin of the arrhythmia. Struble then delivers therapy (i.e. ATP) in the chamber initiating the problem.

Struble further discloses that additional "information (not separately shown) would be useful in this therapy. That is, the frequency or rate of the sVT can be determined through the collection of timing data. This will indicate at what rate IMD 10 needs to overdrive the cardiac pacing system." (Struble, col. 15, lines 48-52). Thus, Struble determines the frequency of an arrhythmia to adjust the overdrive pacing rate of the ATP pulses delivered to the chamber that has been previously identified as the source of the arrhythmia to terminate the arrhythmia.

Struble does not however disclose or suggest a processor operative to evaluate frequencies of left and right atrial signals and, if one of the left and right signals has a higher frequency, the processor determines the atrium with the higher frequency to be the source of atrial flutter as recited in claims 1 and 12 of the present invention. Accordingly, Applicants respectfully submits that claims 1 and 12 are novel and nonobvious over Alt and are allowable. Applicants further submit that claims 2, 3, 5, 6, 8, 10 and 11 and claims 13-15 that depend from claims 1 and 12 respectively are allowable as are claims 1 and 12 and for additional limitations recited therein.

The Examiner rejected claims 4, 7 and 9 under 35 U.S.C. §103(a) as being unpatentable over Struble in view of U.S. Patent 5,584,867 to Limousin et al. Applicants respectfully traverse this rejection.

In view of the foregoing analysis of independent claim 1 in view of Struble, Applicant believes that the rejection of dependent claims 4, 7 and 9 under §103 is rendered moot as claims 4, 7 and 9 depend from allowable independent claim 1.

PATENT

In light of the above remarks, it is respectfully submitted that the application is in condition for allowance, and an early notice of allowance is requested.

Respectfully submitted,

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Date

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